



NATURAL RESOURCES DEFENSE COUNCIL

April 6, 2004

Via Facsimile and U.S. Mail

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Santa Ana Regional Water Quality Control Board
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825 E. Third St.
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**Re: Comments on Model Water Quality Management Plan for San
Bernardino County and the Incorporated Cities of San Bernardino
County**

Dear Ms. Gaslan and Mr. Yeager:

On behalf of Defend the Bay and the Natural Resources Defense Council, we thank you for the opportunity to comment on San Bernardino County's March 2004 revision to its Model Water Quality Management Plan Guidance (the "SB Model"). We recognize the effort by the County to accommodate our prior comments and concerns regarding the initial draft. While we generally consider the present draft a step in the right direction, we remain concerned that the SB Model still falls below the standard set by the recently approved model WQMP for Orange County (the "OC Model"), demonstrating not only that the Model is inadequate in absolute terms but also that it is inadequate in relative terms. As we have stated before, the OC Model sets standards for waters downstream of San Bernardino County that are, as a whole, more protective of water quality. Yet, pollution from San Bernardino County may swamp the gains that a well-implemented model WQMP in Orange County would yield. To avoid such a situation, the Regional Board, whose jurisdiction is watershed-based, must require the County to achieve at least an equivalent standard of control.

Toward that end, we highlight various areas where the Model falls short:

- **Project coverage:** The OC Model covers a significantly larger total number of projects than does the SB Model. As set forth in the SB Model, only those non-category projects that have a precise plan of development or subdivision of land need develop a WQMP. Under the

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OC Model, however, projects requiring the issuance of a non-residential plumbing permit are also required to develop a WQMP. Consequently, the SB Model's coverage is less than the OC Model's and as a result, the SB Model is less protective of water quality.

- **BMP incorporation:** For category projects, Orange County requires that the project WQMP incorporate all source control BMPs unless not applicable to the project due to project characteristics. The SB Model has the same requirement but also allows projects to exclude BMPs based on feasibility. Furthermore, the OC Model sets forth various source control requirements applicable to individual project features and categories, requirements that cannot otherwise be ignored. (See Orange County Model WQMP at 7.11-25.) The SB Model does not but should do likewise.

Likewise, while the SB Model states that BMPs shall be incorporated into a project to minimize the impact from identified pollutants of concern, the SB Model improperly focuses project proponents on their obligation not to cause or contribute to an impairment in already impaired waters and glosses over the permittees' responsibility that no discharge cause or contribute to any impairment, existing or potential. As such, the SB Model's reference to pollutant offsets on page 2-2 conflicts with the permit in that it ignores all other pollutants and presents no method for permittees to prevent impairments from occurring.

- **Treatment Control BMP selection:** The OC Model specifies that for pollutants that are also causing an impairment in receiving waters, the project WQMP incorporate one or more BMPs with medium or high effectiveness. For other pollutants, BMPs should be selected that are effective in reducing those pollutants. The SB Model contains no such similar instruction. In fact, the SB Model merely points project proponents to a table of the effectiveness of various BMPs without any instruction at all. To be as effective as the OC Model, the SB Model should guide project proponents and permittees more in the selection of appropriate treatment control BMPs.
- **Hydrologic conditions of concern:** The SB Model considers that no hydrologic condition of concern exists when all downstream conveyance channels from a project are engineered, hardened, and regularly maintained. Yet the SB Model defines engineered, hardened, and regularly maintained channels to include channels approved for construction and hardening whether or not construction is complete. As such, the SB Model contemplates sacrificing downstream channels as long as those channels are planned to be but not yet hardened. By contrast, the OC Model considers there to be a potential condition of concern anytime that a downstream channel is fully natural or partially improved with a potential for erosive conditions or

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alteration of habitat integrity to a degree that, cumulatively or individually, adversely affects beneficial uses as a result of upstream development. Consequently, the OC Model is more protective of downstream habitat and water quality.

Furthermore, the SB Model requires less intensive hydrologic modeling than does the OC Model. For instance, the SB Model requires modeling that accounts for the 1-, 2-, and 5-year frequency storm events. The OC Model requires that rainfall runoff characteristics including peak flow rate, flow velocity, runoff volume, time of concentration, and retention volume be developed for the 2- and 10-year frequency, Type I storm of six-hour or 24-hour duration.

- **Watershed impacts:** Section 7 of the Orange County DAMP commits the permittees to a process whereby they will "continue to enlarge their understanding of receiving waters on a watershed scale." 2003 Drainage Area Management Plan at 7-35. Moreover, the County agreed to make the assessment of cumulative impacts meaningful by developing a prototype methodology that would enable permitting authorities to assess the impact of one particular project in light of other actual or planned development projects. In San Bernardino, there is no such equivalent commitment to gather and develop such information and forecasting tools. As we have stated before, it is nearly impossible to definitively judge San Bernardino's program until the County submits the associated DAMP and any other adjunct documents that might be produced related to the County's overall program. Without a commitment on the part of the County equivalent to Orange County's commitment, the SB Model will not be as protective of water quality as possible.
- **Equivalent alternative treatment controls:** While not technically the waiver program envisioned in the OC Model, the SB Model's equivalent treatment control "program" is largely the equivalent concept and should therefore include the same stringent requirements. For instance, under the OC Model, the project proponent bears the burden of proof that all structural treatment control BMPs have been considered and rejected as infeasible. This should be made explicit in the SB Model. It should also be made explicit that the offsite solution may not cause or contribute to an exceedance of water quality objectives.

Additionally, we find that the model falls short for several other reasons:

- **Inconsistencies and errors:** In many places, it appears as though the SB Model has not adequately been proofread. For instance, in Section 2.5.3, which deals with treatment control BMPs, the SB Model makes a circular

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reference to Section 2.5.3 for a discussion of equivalent treatment alternatives actually discussed in Section 2.5.4. Likewise, on page 2-20, there are three footnotes (5, 6, and 7) that are not attached to any text on that page.¹

More importantly, Table 2-4, which provides a treatment control BMP selection matrix, excludes metals as a pollutant of concern. Likewise, Table B-2, which also provides a treatment control BMP selection matrix, excludes biological oxygen demand and pesticides as pollutants of concern. Aside from these differing omissions, however, these two tables are also inconsistent with each other, showing different levels of effectiveness for each BMP/pollutant of concern combination. These two tables must be reconciled.

Such inconsistency is rampant throughout Attachment A, which is the WQMP template for project proponents. That template is in fact so inconsistent with the SB Model itself that the template fails to faithfully implement the model. For instance, Section 2.1 of the template does not provide the equivalent consideration of pollutants of concern as is provided in Section 2.2 of the SB Model. Furthermore, it is not entirely clear how a project proponent is supposed to use the shorthand checklist provided in Section 2.2 of the template. In fact, Section 2 of the template ignores the watershed and cumulative focus set forth in the SB Model. As such, we suggest that the Board require the County heavily revise the template so that it is consistent with the model and provides equivalent guidance to project proponents.

Furthermore, inconsistency is also present in the discussion of equivalent off-site alternative treatment and regional treatment solutions. Given the similarity between the two solutions, the conditions imposed on them should largely be identical. Therefore, whereas the SB Model states that waters of the United States cannot be used to transport pollutants to a regional facility, the SB Model must also specify that those same waters not be used to transport pollutants to an off-site equivalent alternative treatment facility.

As one last example of inconsistency, the SB Model, on page 2-8, states that site design and source control BMPs must be implemented unless determined to be infeasible. On pages 2-10 to 2-13, however, the SB Model does not mention feasibility as a condition for the application of site-design BMPs. Rather those BMPs must be applied as appropriate. Furthermore, as discussed above, feasibility should not even be a consideration for the incorporation of site-design and source control BMPs. Rather, the critical factor is whether those BMPs are appropriate given project characteristics.

¹ On that page, there are also typographical errors that should be corrected.

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- **Lack of specificity:** The SB Model continues to lack specificity in certain areas. For instance, the SB Model repeatedly uses the standard of "feasibility" (or "infeasibility") throughout,² yet the term is only defined in the discussion in Section 2.5.4 of equivalent treatment control alternatives. We suggest, as we have earlier, that the Board require the County add an appendix that contains definitions for such terms used throughout the SB Model so that those terms could be interpreted consistently.

The lack of specificity also manifests itself in residual ambiguity throughout the SB Model. For instance, in Section 1.4, the SB Model states that the combination of BMPs must *adequately* address all identified pollutants and hydrological conditions of concern, but never specifies what "adequate" is. In light of the County's removal of references to the standards set forth in the Permit, use of such terminology leads to ambiguity. Likewise, in its discussion of source control BMPs, the SB Model states that permanent stabilization BMPs be installed on disturbed slopes and in channel crossings *as quickly as possible*, leaving it entirely up to the reader's fancy to determine whether a project complies with the requirement.

Lastly, and most notably, the SB Model fails to set forth with any specificity the standards against which project WQMPs will be held. Prior versions of the draft included references to the MEP, BAT, and BCT standards, as well as the Permit's receiving waters limitations. We are concerned that in the present draft, those standards have been removed and replaced by an ambiguous statement that "A project WQMP shall meet all the standards of compliance and any other requirements specified in the Permit."

We feel that to be useful, it is important that the SB Model be as transparent as possible. There is no reason why the SB Model should not *accurately* reiterate the standards set forth in the permit yet many reasons why it should (namely, so that permittees and project proponents will be aware of those standards at all times). Consequently, we ask that the Board require the County reinsert language from the prior drafts that refers to the MEP, BAT, and BCT standards as well as the receiving waters limitations.

Lastly, we remain concerned over the use of the Rational Formula to determine the flow for which a flow-based BMP should be designed. As we have previously commented, reliance on this formula is outdated and overly simplistic. Though the County now cautions against the use of the formula in some instances, it limits that caution only to cases of "high caution" or where the formula is not recommended at all, leaving the formula to be used in cases where there still exists substantial doubt about its applicability. Furthermore, the County steadfastly ignores its responsibility to develop more up-to-date methods of

² See, e.g., pp. 1-3, 2-8, 2-10, 2-13, 2-15, A-13.

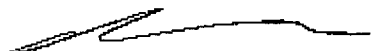
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determining flow. Such alternatives exist if only the County were to pursue them.³ We recommend that the Board require the County pursue such alternatives in conjunction with other such efforts in Southern California in order to find the continued use of the Rational Formula acceptable.

* * *

Thank you for considering our comments. Given that the Model WQMP sets the groundwork for implementing the provisions of the San Bernardino County Stormwater Permit, the Model must provide useful and specific criteria to ensure that threats to water quality from new development and significant redevelopment are reduced. While we recognize that the County has made progress in responding to the comments by staff and ourselves, these efforts are not yet adequate. Accordingly, we ask that the Board require the County to incorporate these comments.

Sincerely,



David S. Beckman
Dan Gildor
Natural Resources Defense Council and
Defend the Bay

cc: Mr. Robert Caustin, Defend the Bay

³ For instance, one alternative is a continuous simulation model based on EPA's HSPF (Hydrologic Simulation Program-Fortran) model. Such a model has considerable advantages over other event-based models such as the Rational Formula. For example, single event models cannot take into account storm events that may occur just before or just after the single, design storm event that is under consideration.